

U.S. Serial No. 09/057,313
Attorney Docket No. 033449-002
Amendment

Remarks

New claims 55-66 have been added. Review and reconsideration in light of this Amendment are respectfully requested.

Claims 16-19, 27, 28, 33, 37-40 and 42-44 are rejected as allegedly defining obvious subject matter over U.S. Pat. No. 4,325,667 to Freeman in view of the Kalmar web site (cited in the Office action of April 3, 2003) and in view of U.S. Pat. No. 3,691,595 to Backteman et al. The Office action takes the position that it would have been obvious to one of ordinary skill in the art to modify the method of the Freeman reference to use the reach stacker and containers of the Kalmar reference to arrive at the claimed invention. The proposed motivation for the combination is that the combination would protect the shipped product from moisture.

Applicant has argued that even if the proposed modification (and in particular the combination of the Freeman and Kalmar reference) were to be made the claimed invention would not result. Applicant has also argued that one of ordinary skill in the art would not be motivated to combine the Freeman and Kalmar references in the proposed manner because the resultant system would be inoperable. Finally, applicant has argued that the Office action does not provide a proper motivation for the proposed combination of the Freeman and Kalmar references.

Turning to the first two of the arguments, applicant has argued that the proposed modification would not result in the claimed invention, and would not be made by one of ordinary skill in the art due to the disparate natures of the systems of the Freeman and Kalmar references. In particular, applicant has argued that a system of the proposed combination would be inoperable because the structure of the Freeman reference would not be able to accommodate the reach stacker of the Kalmar reference due to differences in size, dimensions, load-bearing characteristics, etc.

The Office action indicates that the modification of the Freeman reference to use support structures capable of supporting the reach stacker and its load is "inherent," and that one of ordinary skill in the art would therefore use appropriately scaled supports. The Office action also

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indicates that the containers of the Kalmar reference are not used to teach a particular size of containers, but are included merely to teach an enclosed container.

However, it is submitted that if the Office action proposes a modification of the system of the Freeman reference (for example, including a widened ramp, a strengthened ramp, strengthened deck, and more stable arrangement of the vessel, etc.) the Office action must first make a proper obviousness rejection (i.e., indication of where the limitations can be found in the prior art, motivation for the proposed modification, etc.). Indeed, if the Freeman reference were to be modified in this manner, essentially no structure of the Freeman reference would remain, as the vessel and ramp (the only components of the Freeman reference which are utilized in the rejection) would no longer remain in their original form. Indeed, it is reiterated that a rejection on the basis that a modification is "inherent" is contrary to the requirements for a proper obviousness rejection. Although anticipation by inherency (as in MPEP §2112) can be proper in certain circumstances, it is submitted that an obviousness rejection which relies upon an "inherent" modification is not proper.

In fact, these very issues involving the ramp, the deck and the configuration of the vessel of the Freeman reference highlight the novelty and patentability of the present invention. Prior to this invention, cranes (either loaded on a ship or located on shore) were used to load and unload containers onto the vessels. These cranes either stayed ashore or traveled with the ship, and did not travel over ramps to load and unload containers. Reach stackers were "land based" vehicles which shuttled the containers to other vehicles (i.e., rail cars, tractor-trailers, etc.) or to locations where the containers could be lifted and transported by cranes, and also did not travel over ramps to load and unload containers.

Although the invention may appear, on its face, to be a relatively simple invention, from a technological standpoint, it is submitted that Applicants have invented a method which is in fact novel and nonobvious, and resulted from creative and nontraditional thinking to cross the "invisible barrier" for reach stackers. Various considerations, including providing a wide,

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reinforced ramp, reinforced deck, and a highly stable configuration to the barge had to be addressed by the applicants.

Furthermore, each of independent claims 16, 22 and 25 specify that the ramp has sufficient strength to support the vehicle when the vehicle is transporting a fully loaded container. Claims 16, 22 and 25 also each specify that the storage deck has sufficient strength to support the vehicle when the vehicle is transporting a fully loaded one of the containers. None of the prior art references cited in the Office action disclose the specific limitations of claims 16, 22 and 25. Instead, the Office action appears to rely upon an "inherent" argument based upon a combination of the Freeman and Kalmar references to arrive at the claimed invention. However, it is difficult to perceive how this claim limitation can be shown when neither of the cited references discloses such a claim feature. Although the Office action argues that it would have been "inherent" to modify the ramp, deck and vessel to support the fully loaded containers, it can be argued with equal force that it would have been "inherent" to reduce the size of the containers so that such support or reinforcement of the ramp would not be necessary.

It is also submitted that the Office action does not include a proper motivation for the proposed combination of references. The proposed motivation for the proposed modification is to "protect the shipped product from moisture." However, it is submitted that if one of ordinary skill in the art wished to protect the pallets of the Freeman reference from moisture, such worker would simply locate a tarp over the goods, or encase the goods in shrink wrap, etc. It is submitted that a worker would not carry out the modification proposed in the Office action, which involves 1) discarding the pallets of the Freeman reference; 2) discarding the forklift trucks; 3) bringing in large containers; 4) bringing in reach stackers to handle such containers; 5) strengthening the ramp; 6) strengthening the deck of the barge; and 7) re-configuring the barge to make it more stable in the lateral direction, all in the name of "protecting from moisture." Instead, there are much other easier, more logical steps a worker would take to protect the shipped goods from moisture such as the use of plastic wrap (see MPEP §2143.01, citing to *In re Ratti*, 270 F.2d 810 (CCPA 1959) in which the court reversed the rejection of the claims on the

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basis that the proposed combination would "require a substantial reconstruction and redesign" of the components of the primary reference).

It is submitted that these somewhat convoluted steps proposed in the Office Action used to "protect from moisture" may result from use of applicant's disclosure as a template to reconstruct applicant's invention. It is noted that the reach stackers of the Kalmar reference are all shown working adjacent to barges, and loading containers onto and from the barges. However, none of the photographs show the reach stackers driven onto a barge, and the Office has to date not produced any references that show a reach stacker being driven onto a vessel or barge for loading operations.

Thus, besides the fact that the Freeman and Kalmar references cannot be combined to arrive at the claimed invention, it is respectfully submitted that the Office action has not provided sufficient motivation for the proposed combination of the Freeman and Kalmar references.

In addressing the Declaration of Mr. Ralph Heim filed on October 3, 2003, the Office action takes the position that the declaration is insufficient in that the Declaration provides no evidence of long felt need. However, the Declaration, at paragraph 11 does in fact state that there was a long felt need in the industry for systems or methods for loading and unloading containers to and from marine vessels without requiring the use of cranes or "roll-on roll-off" processes. Thus, contrary to the position advance in the Office action the Declaration is, in itself, evidence of the long-felt need which is not rebutted in the Office action.

The Office action also indicates that the Declaration refers only to the "invention" and not to specific claims, and that there is allegedly no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. However, MPEP §716.03(a) states that objective evidence of nonobviousness including commercial success must be commensurate in scope with the "claimed invention," and this section of the MPEP does not require reference to any individual claims of the application.

Further, paragraph 5 of the Declaration specifies that "The invention defined in the claims of this application is known and referred to...as the 'TBC System.'" Each of paragraphs 5-10 of

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the Declaration then go on to provide evidence of the non-obviousness of the "TBC System" and thereby provide evidence of the non-obviousness of the claimed invention.

Finally, the Office action does not specifically address the evidence of commercial success, improved performance, and unexpected results presented in the Declaration.

The Office action indicates that the Declaration does not provide a showing that others of ordinary skill in the art were working on the problem, and that persons skilled in the art who were presumably working on the problem knew of the teachings of the cited references. The Office action then cites to MPEP §716.04. However, under MPEP §706.01, declarations containing evidence of unexpected results, commercial success, long-felt but unsolved needs, etc. must be considered by the Examiner. Instead, the Office action appears to merely point out evidence of secondary considerations which is allegedly lacking from applicant's Declaration, but applicant is not required to provide any particular evidence of secondary meaning.

In any case, with respect to the issues raised by the Office action the Declaration includes a statement of long-felt need, and that statement stands by itself. Thus the Office action does not appear to include any rebuttal to this statement (or in fact, any discussion of evidence of commercial success, improved performance, and unexpected results presented in the Declaration) but instead merely refers to additional showings which could possibly be made.

New claim 55 depends from claim 16 and specifies that the storage deck has a sufficient strength sufficient to support at least about 1,750 pounds per square foot. Support for this claim can be found at page 5, lines 12-14 of the application. This magnitude of deck strength helps to support the large, loaded containers, or stacks of several loaded containers thereon. As noted in the application, this deck strength is several times that of a typical roll-on roll-off vessel.

In contrast, the prior art freight handling method specified in the Freeman reference is disclosed for use with loaded sugar pallets which would not provide a weight approaching the weight of loaded containers. Thus the deck of the associated vessel would not meet the strength requirement specified in claim 16. In addition the Office action does not include any showing that it would have been obvious to one of ordinary skill in the art to provide a strengthened deck

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to the prior art vessel of the Freeman reference (i.e. where the claim limitation can be found in the prior art, a proper motivation for combining references, etc.).

New claim 56 depends from claim 16 and specifies that the marine vessel has a beam at least about $\frac{1}{4}$ of its length to provide a relatively stable marine vessel. Support for this claim can be found at page 5, lines 17-24 of the application. As noted in the application, this beam-to-length ratio is approximately two times that of a typical ocean going vessel. The high beam-to-length ratio provides good stability to the vessel particularly because the vessels must support such high weight loads. For example, a reach stacker with a loaded container carries sufficient weight that, when the reach stacker is first driven on to a vessel, the vessel may have a tendency to tilt, or list, to the side of the reach stacker. The high beam-to-length ratio specified in claim 56 addresses this issue and allows loaded reach stackers to drive about the deck of the vessel while maintaining the stability of the vessel. In contrast, the prior art method specified in the Freeman reference does not address the issue of listing to one side, and would not appear to have to address such an issue due to the relatively low weight of the freight and forklifts disclosed therein.

New claim 57 depends from claim 16 and specifies that the ramp has a length of at least about 75 feet to reduce the angle of inclination of the ramp. Support for the claim can be found at page 6, lines 23-25. Due to the very high weight loads of full containers, as well as the weight of the reach stackers, the ramp should have a low angle of inclination to ensure that the reach stackers can be safely driven over the ramp. In contrast, none of the cited art appears to disclose the subject matter of claim 57.

New claim 58 depends from claim 16 and specifies that the marine vessel is a barge and has a pointed bow. As noted at page 5, lines 19-23 of this application, the pointed bow, in combination with the particular beam-to-length ratio, enables the barge 12 to be towed at speeds up to 50% above those of similar sized barges with the same horsepower tug.

In the rejection of claim 54, the Office action indicates that it is notoriously old and well known in the art to provide a marine vessel with a pointed bow. However, it is noted that claim

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58 specifies that the marine vessel is a barge. Thus, the Office action's position that it is known in the art to provide a marine vessel with a pointed bow is traversed with respect to barges.

New claims 59-66 depend from claims 22 and 25 and include limitations similar to those of claims 55-58 discussed above.

Thus, in sum, in view of the foregoing it is submitted that the claims define over the cited reference and that the application is in a condition for allowance, and a formal notice thereof is requested.

The Commissioner is hereby authorized to charge any additional fees which may be required by this paper, or to credit any overpayment to Deposit Account 20-0809. Applicant hereby authorizes the Commissioner under 37 C.F.R. §1.136(a)(3) to treat any paper that is filed in this application which requires an extension of time as incorporating a request for such an extension.

Respectfully submitted,



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